

IN THE CLAIMS:

1. (original) A method for forming a plurality of transistors proximate an outer surface of a semiconductor substrate comprising:

forming a collector region of a bipolar transistor and a well region of a first field effect transistor by implanting ions having a first conductivity type in a first common ion implantation step;

forming a base region of the bipolar transistor and doping the channel region of a second field effect transistor by implanting ions having a second conductivity type using a second common ion implantation step; and

forming an emitter region of the bipolar device and source and drain regions of the second field effect device by implanting ions of the first conductivity type into the outer surface of the substrate using a third common ion implant step.

2. (original) The method of Claim 1 wherein the third common implant step is also used to form a collector contact region proximate the outer surface of the substrate and electrically coupled to the collector region.

3. (original) The method of Claim 1 and further comprising the step of forming source and drain regions of the first field effect device and forming a base contact region by implanting ions of the second conductivity type into a region of the outer surface of the substrate using a fourth common ion implant step.

4. (original) The method of Claim 1 wherein the ions of the first conductivity type comprise n-type ions and the ions of the second conductivity type comprise p-type ions.

5. (original) The method of Claim 4 wherein the p-type ions comprise boron ions.

6. (original) The method of Claim 4 wherein the n-type ions comprise ions chosen from a class consisting of phosphorous and arsenic.

7. (original) The method of Claim 1 wherein the semiconductor substrate is doped with ions of the second conductivity type such that the collector region is junction isolated from other electronic devices formed in the substrate.

8. (original) The method of Claim 1 and further comprising the step of forming a isolation insulator body proximate the outer surface of the substrate and disposed between the collector region and the emitter region.

9. (original) The method of Claim 1 and further comprising the step of forming a isolation insulator body proximate the outer surface of the substrate and disposed between the emitter region and a base contact region electrically connected to the base region.

10. (original) The method of Claim 1 and further comprising the step of forming a sacrificial gate stack structure disposed outwardly from the outer surface of the substrate and disposed between the emitter region and a base contact region disposed proximate the outer surface of the substrate and electrically coupled to the base region.

Claims 11-20 (cancelled)

21. (original) A method for forming a plurality of transistors proximate an outer surface of a semiconductor substrate comprising:

forming a collector region of a bipolar transistor and a well region of a first field effect transistor by implanting ions having a first conductivity type in a first common ion implantation step;

forming a base region of the bipolar transistor and doping the channel region of a second field effect transistor by implanting ions having a second conductivity type using a second common ion implantation step;

forming an emitter region of the bipolar device and source and drain regions of the second field effect device by implanting ions of the first conductivity type into the outer surface of the substrate using a third common ion implant step;

forming a collector contact region proximate the outer surface of the substrate and electrically coupled to the collector region using the third common implant step; and

forming source and drain regions of the first field effect device and forming a base contact region by implanting ions of the second conductivity type into region of the outer surface of the substrate using a fourth common ion implant step.

22. (original) The method of Claim 21 wherein the ions of the first conductivity type comprise n-type ions and the ions of the second conductivity type comprise p-type ions.

23. (original) The method of Claim 22 wherein the p-type ions comprise borons.

24. (original) The method of Claim 22 wherein the n-type ions comprise ions chosen from a class consisting of phosphorous and arsenic.